

AMENDMENTS

Please amend the application as follows:

In the Claims:

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1. (Currently Amended) A communication apparatus for communicating with telephony networks, comprising:

memory for storing sets of impedance control values used for simulating a plurality of circuit impedances;

a processor configured to:

select one of said sets of impedance control values based on characteristics of a telephony network to which the communication apparatus is or will be connected;

and

combine data to be transmitted over said telephony network with said selected set of impedance control values ~~to serially transmit said selected set of impedance control values during a communication session between said communication apparatus and a remote communication device;~~

a digital-to-analog converter that converts the combined data and said selected set of impedance control values into analog signals ~~configured to receive said selected set of impedance control values from said processor and to transmit said analog signals based on said selected set of impedance control values; and~~

an interface port connected to said telephony network that transmits the output of the digital-to-analog converter over the telephony network, wherein the impedance required by the telephony network is simulated based on the selected set of impedance control values ~~configured to interface signals with a communication connection of a telephony network, wherein said interface port simulates an impedance based on said analog signals;~~

~~said impedance substantially matching an impedance of said telephony network as measured from said communication connection.~~

2. (Original) The communication apparatus of claim 1, wherein said processor is configured to continuously transmit said selected set of impedance control values during said communication session.

3. (Cancelled).

4. (Original) The communication apparatus of claim 1, further comprising an input device configured to receive an input from a user, said processor configured to select said selected set of impedance control values based on said input.

5. (Original) The communication apparatus of claim 1, wherein said processor is further configured to identify which of said sets of impedance control values, when converted to analog signals and transmitted to said interface port, causes said interface port to simulate said impedance that substantially matches said impedance of said telephony network.

6. (Original) The communication apparatus of claim 5, wherein each of said sets of impedance control values, when converted to analog signals and transmitted to said interface port, causes said interface port to simulate a different impedance.

7. (Currently Amended) A communication apparatus for communicating with telephony networks, comprising:

means for storing sets of impedance control values used for simulating a plurality of circuit impedances;

means for selecting one of said sets of impedance control values based on characteristics of a telephony network to which the communication apparatus is or will be connected;

means for combining data to be transmitted over said telephony network with said selected set of impedance control values; ~~and to serially transmit said selected set of impedance control values during a communication session between said communication apparatus and a remote communication device;~~

means for converting said ~~selected set of impedance control values~~ combined data and said selected set of impedance control values into analog signals; and

means for ~~interfacing~~ transmitting said analog signals over with a communication connection of a said telephony network, wherein the impedance required by the telephony network are simulated based on the selected set of impedance control values ~~said interfacing~~ means ~~simulating an impedance based on said analog signals, said impedance substantially matching an impedance of said telephony network as measured from said communication connection.~~

8. (Original) The communication apparatus of claim 7, wherein said transmitting means continuously transmits said selected set of impedance control values during said communication session.

9. (Cancelled).

10. (Original) The communication apparatus of claim 7, further comprising a means for receiving an input from a user, said selecting means configured to select said selected set of impedance control values based on said input.

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11. (Currently Amended) A method for communicating with telephony networks, comprising the steps of:

providing an interface port;

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interfacing said interface port with a communication connection of a telephony network;

storing sets of impedance control values used for simulating a plurality of circuit impedances;

selecting one of said sets of impedance control values based on characteristics of a telephony network to which the interface port is or will be connected;

combining data to be transmitted over said telephony network with said selected set of impedance control values;

~~serially transmitting said selected set of impedance control values to a digital-to-analog converter;~~

converting, ~~at said digital-to-analog converter,~~ said combined data and said selected set of impedance control values into analog signals;

transmitting said analog signals over the telephony network; and

simulating an the impedance required by the telephony network based on the selected set of impedance control values ~~at said interface port based on said analog signals; and~~

~~performing said selecting step such that said impedance substantially matches an impedance of said telephony network as measured from said communication connection.~~

12. (Cancelled).

13. (Original) The method of claim 11, further comprising the steps of:
receiving an input; and
performing said selecting step based on said input.

14. (Original) The method of claim 11, further comprising the steps of:
interfacing said interface port with a communication connection of another telephony
network;
selecting another of said sets of impedance control values;
serially transmitting said other selected set of impedance control values to said digital-
to-analog converter;
converting, at said digital-to-analog converter, said other set of impedance control
values into other analog signals;
simulating another impedance at said interface port based on said other analog
signals; and
performing said selecting another of said sets of impedance control values step such
that said other impedance substantially matches an impedance of said other telephony
network as measured from said other communication connection.

B/ 15. (Currently Amended) A method for communicating with telephony networks, comprising the steps of:

providing an interface port;

interfacing said interface port with a communication connection of a telephony network;

transmitting analog signals to said interface port, said analog signals having voltages;

and

varying said voltages of said analog signals; ~~and~~ such that

causing said interface port to continuously simulate a particular impedance during a communication session in response to said analog signals.

16. (Original) The method of claim 15, further comprising the step of combining values from said selected set of impedance control values with data that is to be communicated from said interface port to a remote communication device.

17. (Original) The method of claim 15, further comprising the step of:

storing sets of impedance control values;

selecting one of said sets of impedance control values;

serially and continuously transmitting said selected set of impedance control values to a digital-to-analog converter during said communication session;

producing said analog signals at said digital-to-analog converter; and

performing said varying step based on said selected set of impedance control values.

18. (Original) The method of claim 17, further comprising the steps of:

receiving an input; and

performing said selecting step based on input.

19. (Original) The method of claim 17, further comprising the steps of:

interfacing said interface port with a communication connection of another telephony network;

transmitting other analog signals to said interface port, said other analog signals having other voltages;

varying said other voltages of said other analog signals;

causing said interface port to continuously simulate a particular impedance during another communication session in response to said other analog signals;

selecting another of said sets of impedance control values;

serially and continuously transmitting said other selected set of impedance control values to said digital-to-analog converter during another communications session;

producing said other analog signals at said digital-to-analog converter; and

performing said varying said other voltages step based on said other selected set of impedance control values.